

# **Supplemental Exhibit to Google's Motion in Limine No. 1 (ECF 519)**

1 UNITED STATES DISTRICT COURT  
2 NORTHERN DISTRICT OF CALIFORNIA  
3 OAKLAND DIVISION  
4

5 CHASOM BROWN, WILLIAM BYATT, )  
6 JEREMY DAVIS, CHRISTOPHER )  
7 CASTILLO, and MONIQUE )  
8 TRUJILLO, individually and on )  
9 behalf of all similarly )  
10 situated, )  
11 )  
12 Plaintiffs, )  
13 )  
14 vs. )Case  
15 )4:20-cv-03664-YGR-SVK  
16 GOOGLE LLC, )  
17 )  
18 Defendant. )  
19 \_\_\_\_\_ )  
20  
21  
22  
23  
24  
25

16 VIDEO-RECORDED DEPOSITION OF  
17 BLAKE LEMOINE  
18 Thursday, December 21, 2023  
19 Volume I  
20  
21

22 Reported by:  
23 CARLA SOARES  
24 CSR No. 5908  
25 Job No. 6377402  
Pages 1 - 232

1 UNITED STATES DISTRICT COURT  
2 NORTHERN DISTRICT OF CALIFORNIA  
3 OAKLAND DIVISION  
4

5 CHASOM BROWN, WILLIAM BYATT, )  
6 JEREMY DAVIS, CHRISTOPHER )  
7 CASTILLO, and MONIQUE )  
8 TRUJILLO, individually and on )  
9 behalf of all similarly )  
10 situated, )  
11 Plaintiffs, )  
12 vs. )Case  
13 )4:20-cv-03664-YGR-SVK  
14 GOOGLE LLC, )  
15 Defendant. )  
16 \_\_\_\_\_)

17 VIDEO-RECORDED DEPOSITION OF BLAKE  
18 LEMOINE, Volume I, taken on behalf of Defendant,  
19 beginning at 9:34 a.m., and ending at 4:12 p.m., on  
20 Thursday, December 21, 2023, before CARLA SOARES,  
21 Certified Shorthand Reporter No. 5908.  
22  
23  
24  
25

1 APPEARANCES:

2  
3 For the Plaintiffs:

4 BOIES SCHILLER FLEXNER LLP  
5 BY: JAMES LEE, Attorney at Law (via Zoom)  
6 100 SE 2nd Street, 28th Floor  
7 Miami, Florida 33131  
305.539.8400  
jlee@bsfllp.com

8 BOIES SCHILLER FLEXNER LLP  
9 BY: MARK C. MAO, Attorney at Law  
BY: JOSHUA M. STEIN, Attorney at Law  
44 Montgomery Street, 41st Floor  
10 San Francisco, California 94104  
415.293.6800  
11 mmao@bsfllp.com  
jstein@bsfllp.com  
12

13 BOIES SCHILLER FLEXNER LLP  
14 M. LOGAN WRIGHT, Attorney at Law (via Zoom)  
725 S. Figueroa Street, 31st Floor  
Los Angeles, California 90017  
15 213.629.9040  
mwright@bsfllp.com  
16

17 SUSMAN GODFREY  
18 BY: RYAN SILA, Attorney at Law (via Zoom)  
1301 6th Avenue, 32nd Floor  
New York, New York 10019  
19 212.336.8330  
rsila@susmangodfrey.com  
20

21 MORGAN & MORGAN  
22 BY: RYAN J. MCGEE, Attorney at Law (via Zoom)  
201 N. Franklin Street, 7th Floor  
Tampa, Florida 33602  
23 813.223.5505  
rmcgee@forthepeople.com  
24  
25

1 APPEARANCES (Continued):

2  
3 QUINN EMANUEL URQUHART & SULLIVAN LLP  
4 BY: ANDREW H. SCHAPIRO, Attorney at Law  
5 191 N. Wacker Drive, Suite 2700  
6 Chicago, Illinois 60606  
312.705.7400  
andrewschapiro@quinnemnauel.com

7 QUINN EMANUEL URQUHART & SULLIVAN LLP  
8 BY: YUSEF AL-JARANI, Attorney at Law  
9 865 S. Figueroa Street, 10th Floor  
10 Los Angeles, California 90017  
213.443.3000  
yusefaljarani@quinnemanuel.com

11  
12 ALSO PRESENT: Reilly Leet, Video Operator

13  
14 --o0o--  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

EXAMINATION

BY MR. SCHAPIRO:

Q Mr. Lemoine, how are you feeling this morning?

A It's been a week, but I'm feeling good. Feeling good.

Q What do you mean, "It's been a week"?

A Oh, just getting ready to go home for Christmas, dealing with family stuff. But otherwise, things are going well, and I'm ready for the holidays.

Q Have you ever been deposed before?

A I've been questioned in this kind of setting before. I don't have the specific legal expertise to know if it was technically a deposition or not.

I believe so, but I'm not a lawyer.

Q So just in case, let me go over a few of the ground rules for a deposition. I'm sure your very capable attorneys have already told you most of this.

Is that all right?

A Sure thing.

Q So I'm going to be asking you questions. Our very capable court reporter is going to be

1 writing down your answers and, therefore, we need to  
2 be careful not to speak over each other.

3 So I will try to let you finish your  
4 answer before I follow up with a question, and I  
5 will ask that you let me finish my question before  
6 you answer.

7 Make sense?

8 A Yes, it does.

9 Q Any objections -- strike that.

10 There may be times when your attorney  
11 objects. If your attorney objects to one of my  
12 questions, unless your attorney instructs you not to  
13 answer and you comply with that instruction, you're,  
14 nevertheless, obligated to answer.

15 Do you understand that?

16 A Yes, I do.

17 Q I'm going to assume that you understand my  
18 questions. So, please, if you don't understand a  
19 question of mine, I'd ask that you just ask me to  
20 clarify. Okay?

21 A Sure thing.

22 Q Obviously it's -- as you understand,  
23 you're under oath, and it's important that you do  
24 your best to answer truthfully.

25 Is there any reason you would not be able

1 to answer truthfully and completely?

2 A There's no reason that I won't be able to  
3 answer truthfully and completely. That is my  
4 intention.

5 Q Are you on any medications that might  
6 affect your ability to either understand my  
7 questions or to answer them capably?

8 A No, I am not.

9 Q Where do you currently work?

10 A I currently am the AI lead at a start-up,  
11 MIMIO.ai, although the name of our company may have  
12 changed by the time this goes to court as we were  
13 recently notified that there's a trademark  
14 infringement with the name "MIMIO." However, it's a  
15 locally based AI start-up.

16 Q And where is it based?

17 A It's based out of here in the Bay Area.  
18 We work remotely and are kind of scattered all  
19 around the country.

20 The CEO and the CTO live up near  
21 Sacramento, but they were from San Francisco very  
22 recently. I live here in San Francisco as does one  
23 of the other devs. And then we have some people in  
24 New York, some people in Seattle. And other people,  
25 I don't know where they live, but they're around.



1 information in my LinkedIn profile, if I recall  
2 correctly. "ABD," it stands for "All but  
3 dissertation," "Never completed." I'm sure "ABD" is  
4 in there somewhere. And if it's not, that's an  
5 oversight on my part.

6 Q Can you point me to where it says "ABD"?

7 A This paper doesn't. I'm talking about the  
8 website, in my memory.

9 I believe that there is more information  
10 available through the various options on that  
11 website than is present on this paper. However, I  
12 could be misremembering. I don't have a computer in  
13 front of me.

14 And when I get home, I'll check and make  
15 sure that I add "ABD" or some other indicator to let  
16 people know that I didn't complete the Ph.D.

17 Q You -- in this litigation, you've  
18 submitted a declaration in connection with this  
19 case, correct?

20 A Yes, I did.

21 Q How did this come to pass in your own  
22 words?

23 I know -- correct me if I'm wrong -- in  
24 the declaration, you say that you saw some news  
25 articles about this case, and you reached out to

1 Mr. Mao, the attorney sitting next to you.

2 But can you provide me with a little more  
3 detail on it?

4 A Yeah. More specifically, it was the top  
5 story in the Google feed. And I daily check the  
6 Google feed, and I always try to read the top five  
7 or ten stories because I helped write those  
8 recommendation algorithms. I know how well-chosen  
9 those stories are for my interest and my knowledge  
10 base.

11 So one day in August, I was reading a  
12 story on the Google feed about this case. And I  
13 read all the details. I heard that one of Google's  
14 motions was denied. And as I learned more about the  
15 case, I'm like, "Oh, wait. I actually know stuff  
16 relevant to this."

17 So I reached out and said, "There's a  
18 possibility that I have information relevant to this  
19 case. If so, I would be happy to help. Let me  
20 know."

21 Q And what happened next?

22 A Mark Mao reached back out to me. He said,  
23 "Okay. Well, what do you know?"

24 And I began describing information about  
25 my time at Google, what I had worked on, various

1 interactions I had had with the policy teams and my  
2 knowledge about systems like Footprints and how it  
3 related to the matters in the story that Google sent  
4 me.

5 And ultimately he determined that he did  
6 want me to come here and talk to you today. So I'm  
7 here.

8 Q When did you agree with Mr. Mao, or anyone  
9 at Boies Schiller & Flexner, that they would be  
10 serving as your lawyers in connection with this  
11 case?

12 A Oh. After they -- the lawyers in this  
13 case decided that they were interested in having me  
14 as a witness, they explained some reasons to me why  
15 it might be to my benefit to actually retain their  
16 legal services in connection with this case, and I  
17 did so.

18 MR. LEE: Just so -- Mr. Lemoine, this is  
19 James. You're doing just fine. But --

20 MR. SCHAPIRO: Objection. No coaching the  
21 witness.

22 MR. LEE: Excuse me. Let me make my  
23 record.

24 You're doing just fine. I want you to be  
25 a little bit careful about some privilege issues.

1 A I don't recall.

2 Q Have you checked your emails to see?

3 A I do.

4 Q You do what?

5 A Check my emails. But I don't recall in  
6 this moment right now.

7 MR. SCHAPIRO: So we would ask that any  
8 emails that were exchanged prior to Mr. Lemoine  
9 retaining Boies Schiller be produced.

10 THE WITNESS: I believe those have all  
11 been given.

12 MR. LEE: Blake, let me talk.

13 We'll take that up after the deposition or  
14 on a break.

15 MR. SCHAPIRO: Fine.

16 MR. LEE: Go ahead.

17 BY MR. SCHAPIRO:

18 Q Are you paying your lawyers any fees in  
19 connection with this engagement, any legal fees?

20 A I am not.

21 Q Have plaintiffs' lawyers -- let me break  
22 this down.

23 Have they, thus far, paid you any money in  
24 connection with this case, including reimbursement  
25 for anything?

1 A No, they have not.

2 Q Have they said that they will pay you  
3 anything for your role as a witness in this case?

4 A No, they have not.

5 Q Have they told you that you might have any  
6 type of financial recovery in connection with this  
7 case?

8 A No, they have not.

9 Q Did you say earlier that you live in the  
10 Bay Area?

11 A Yes, I do. I live a few blocks away from  
12 here, actually.

13 Q How did you get here today?

14 A By Lyft.

15 MR. SCHAPIRO: Let's take a look at what  
16 we will call Exhibit 2. This is a document that I  
17 believe is your declaration in this case.

18 (Exhibit 2 was marked for identification  
19 and is attached hereto.)

20 BY MR. SCHAPIRO:

21 Q So please take a look and tell me, is  
22 this -- as far as you can tell, is this the  
23 declaration that you submitted in this case?

24 A I didn't memorize every word. So I  
25 couldn't swear by every word, but in general, yes,

1 this looks like the document which I submitted.

2 Q All right. So I'd ask you to take a look  
3 at paragraph 3 in this deposition [sic].

4 Could you read that paragraph out loud?

5 A "I worked for Google in Mountain View,  
6 California, as a software engineer between  
7 February 2015 and November 2017, and then as a  
8 senior software engineer between November 2017 and  
9 July 2022. In July of 2022 my employment with  
10 Google was terminated after I complied with a  
11 request for information about potentially illegal  
12 activity at Google from a U.S. Senator's office."

13 Q And when you -- so when you started at  
14 Google in, according to this, February 2015, you  
15 worked on Google Search, correct?

16 A I worked on Google Now, which, at the  
17 time, had just been moved under Google Search from  
18 Google Chrome, I believe. And then before that, it  
19 was part of Google Maps.

20 The history of Google Now moved around,  
21 but it eventually found a home with the Android  
22 Google Search app. And when I joined Google, that  
23 was the situation. They had just moved under the  
24 Android Google Search app. I joined that team and  
25 began working on that product.

1 Q And then at some point after that, you  
2 started working on Google's AI -- in this deposition  
3 I'll just say "AI" -- which I think we can agree is  
4 "artificial intelligence."

5 A No, not after that.

6 Q Okay.

7 A On the first day, from the very first day,  
8 I was working on AI at Google.

9 Q Okay. So from February 2015?

10 A Yes.

11 Q And is it fair to say you consider  
12 yourself very knowledgeable about Google's AI  
13 products?

14 A Yes, I do.

15 Q And about their nature and capabilities?

16 A That's correct.

17 Q And you've never knowingly said anything  
18 false about the nature and capabilities of Google's  
19 AI products, right?

20 A Are you asking whether I have ever said  
21 something which was incorrect that I later found out  
22 was incorrect or whether I told a lie?

23 Q Told a lie.

24 A No.

25 Q How about that category that you just

1 into that category, mistakes that you made that you  
2 attempted to publicly acknowledge and repair?

3 MR. LEE: Objection to form.  
4 Mischaracterizes prior testimony.

5 Go ahead.

6 THE WITNESS: I was just trying to give  
7 space.

8 No, I do not have any specific memories  
9 right now. I'm literally just trying to communicate  
10 with care.

11 BY MR. SCHAPIRO:

12 Q You were never a -- well, I'll ask you,  
13 were you ever a member of the Chrome product team?

14 A By that, do you mean was I ever a member  
15 of the team working on the Chrome product, or do you  
16 mean was I ever an employee reporting up to the  
17 senior vice president of Chrome?

18 Q How about both?

19 A Yes to the first; no to the second.

20 Q So what do you mean when you say you were  
21 a member of the team working on the Chrome product?

22 A So when it comes to the actual work of  
23 engineering on Google products, the reporting and  
24 managerial structure is only a suggestion.

25 The fact is, I frequently worked with



1 teams around Google, both in order to consume data  
2 that their products produce, as well as to send data  
3 from Google Search to the device surfaces that their  
4 product had real estate on, as well as various  
5 integration products.

6 So one particular project in particular  
7 sticks out, which is why I answered yes to the first  
8 kind, which was the AGSA Chrome integration.

9 When we added the search feed to new  
10 Chrome tabs, that was the project which was most  
11 clearly one of my contributions to the Chrome  
12 product.

13 On the regular, I would consume -- like,  
14 on a weekly basis, I would consume data that Chrome  
15 produced, but that was one of the times when we were  
16 sending data to Chrome.

17 Q Okay. So some of your work involved or  
18 touched on Chrome, but you were not part of the  
19 Chrome product team in terms of the reporting  
20 structure?

21 A That's correct.

22 Q Is that fair?

23 A That's correct.

24 Q How about the Google Ads product team?

25 A That, same answer. Same exact answer to

1 that.

2 With that one, I actually had a  
3 counterpart on the Ads team that was my mirror. So  
4 there was a single point of contact there. Usually  
5 he was the one writing the code, and I was advising  
6 in an attempt to maintain the separation between  
7 editorial and advertising.

8 Q I'm sorry. I don't understand. Can you  
9 elaborate?

10 A Sure.

11 So a big part of the way that Google's  
12 corporate org chart and policies are designed is  
13 actually reflective of a metaphor drawn from  
14 journalism, where you have reporters who are working  
15 under editorial, and you have salespeople working  
16 under advertising.

17 And the advertisers are allowed to know  
18 which stories the reporters are working on so they  
19 can sell ads appropriate to the content. However,  
20 the reporters are not allowed to ask the  
21 advertisers, "Which people will give us money if we  
22 do a story relevant to their business?"

23 An ethical practice among journalists was  
24 adopted at some point within the last 150 years that  
25 that leads to bad journalism.

1 And when Google was founded, they took  
2 inspiration from that when they structured the  
3 company, and created separate systems for Search and  
4 Ads. Ads can read all of Search's data. That  
5 direction is okay. But Search is not allowed, as a  
6 general principle, to read from Ad's data.

7 Now, with the proactive newsfeed or the  
8 proactive Search feed, there were certain product  
9 reasons to break that a little bit and make the  
10 barrier more permeable.

11 So there was actually quite a lot more  
12 information coming from Ads into Search with respect  
13 to the Google Now product. And myself and Vidur,  
14 Vidur Goyal -- he was my counterpart in Ads. He was  
15 originally on the same team as me, but then moved  
16 into Ads.

17 Q So if I understand correctly, similar to  
18 what we discussed about Chrome, I think what you're  
19 saying is while you were working on Search, you had  
20 occasion or reasons to interact with Ads products at  
21 times, but you were not within the organizational  
22 structure of the Ads team; is that fair?

23 A I'm actually trying to remember if I ever  
24 got reorg'd under Ads for a week. And I'm sorry,  
25 I'm actually having to think through.

1 Q Other than a possible week?

2 A Yeah. So the primary organizational chart  
3 placements of me is, I was under the SVP of Search  
4 and Research, and whatever that moved, under for  
5 about four or five years.

6 Then I moved under Trust and Safety, and  
7 then I moved under Research, under RAI. Those were  
8 the organizational placements of me.

9 And I worked on a wide variety of products  
10 while on those various teams.

11 Q And would your answer be similar if I  
12 asked you about the incognito mode for the Chrome  
13 browser, that it wasn't a product in your job  
14 description or org chart, but something that you  
15 touched on?

16 A So incognito was part of my job  
17 description for a quarter or two. It was part of my  
18 perf.

19 Q Which quarter?

20 A I can't recall. The 2017/2018 time period  
21 is when that project happened. It was definitely in  
22 the packet that I submitted.

23 Q What was the project?

24 A The Chrome integration. The one that I  
25 mentioned a little while ago where we were placing

1 with people at every role, at every level of  
2 management, when developing the AI principles of  
3 Google. And I believe that's what I was thinking of  
4 when I wrote that sentence.

5 However, I did have some amount of contact  
6 with the legal division during the GDPR integration,  
7 but that was usually when one of my managers or the  
8 VP would call in a lawyer.

9 Q I think, as you told us earlier, you're  
10 not a lawyer, correct?

11 A Correct.

12 Q In paragraph 9 of your declaration, you  
13 say, "While I worked at Google, Google took the  
14 position that its internal limitations on access to  
15 end user data (which would include private browsing  
16 data collected by Google) did not apply with respect  
17 to the algorithms, machine learning, and AI services  
18 within Google that would use that data. More  
19 specifically, Google took the position that  
20 information inferred about a user through AI was  
21 considered to be 'data about the user' owned by  
22 Google rather than 'user data' owned by the user. I  
23 implemented privacy compliance according to this  
24 specification under protest."

25 When you say "Google took the position" in

1 that first sentence, who at Google informed you of  
2 this position?

3 A So the final decision-maker on this was  
4 Maureen Heymanns. When I say "Google took the  
5 position," I am talking about the aggregate process  
6 by which Google develops policy decisions.

7 The specific person who was the final  
8 decider there was Maureen Heymanns, H-E-Y-M-A-N-N-S.

9 Q Is she a lawyer?

10 A She was my boss.

11 Q Is she a lawyer?

12 A I do not know.

13 Q In the course of your communications with  
14 the lawyers at Boies Schiller here, have you told  
15 plaintiffs' counsel about any legal advice that you  
16 received from attorneys working for Google?

17 MR. LEE: Wait. Hold on. Can you repeat  
18 that question?

19 And, Mr. Lemoine, pause for a second so I  
20 can consider any privilege ramifications.

21 THE WITNESS: I do have an answer,  
22 actually, that I'm comfortable giving, James.

23 MR. LEE: Let me hear the question again.

24 BY MR. SCHAPIRO:

25 Q In the course of your communications with

1 MR. SCHAPIRO: Yeah, including Boies  
2 Schiller, under -- subject to my objection.

3 MR. LEE: Sure.

4 THE WITNESS: Are you asking if I have  
5 quoted the lawyers or if I have discussed matters  
6 related to conversations that I had with lawyers?

7 BY MR. SCHAPIRO:

8 Q If you have conveyed, whether it was a  
9 direct quote or a paraphrase, what Google lawyers  
10 told you about legal issues.

11 A I cannot recall any instances where I did  
12 that at the moment.

13 Q Take a look at paragraph 10. In this  
14 paragraph, the second sentence -- I'll just read the  
15 whole thing.

16 You say, "In my experience, engineers  
17 within Google ran tests, experiments, and training  
18 regularly on and using browsing data - including  
19 private browsing data - for various Google products  
20 and services. Many of the core AI systems consume a  
21 broad collection of different data sources and the  
22 downstream engineers building products using the  
23 output of those systems have little to no visibility  
24 into whether or not private data were used in the  
25 creation of the AI's output."

1 Did I read that correctly?

2 A Yes, you did.

3 Q And when you say in your experience, that  
4 refers to the experience that we've just been  
5 covering about working on Search and GDPR and AI  
6 products, correct?

7 A Among other things, yes.

8 Q What are the core AI systems that you're  
9 referencing in the second sentence of that  
10 paragraph?

11 A At one point in time, I actually, briefly,  
12 during one of those reorganizations, was under the  
13 core organization at Google.

14 When I was talking about core AI systems,  
15 there is an entire division within Google that does  
16 not service any user-facing products directly. What  
17 they do is they provide horizontal services which  
18 are used by the other product teams.

19 The basic way that information services  
20 and artificial intelligence are built at Google is,  
21 you have data coming from product sources, and those  
22 funnel up in kind of an hourglass fashion into a  
23 very small number of broad -- very, very broad,  
24 abstract artificial intelligences.

25 Those handful of very abstract artificial



1 intelligences, which are drawing from all of the  
2 products' information sources, then provide  
3 information to send data back out. That's what  
4 makes the hourglass, because it fans back out, to  
5 feed all of Google's products and services.

6 To give you an example of one of the core  
7 systems that I was thinking of when I wrote that  
8 system, Hobbes is a core system at Google which is  
9 used to create what are referred to as embedding  
10 vectors for users.

11 This is just an abstract mathematical  
12 representation of the user. You create 500 floating  
13 point numbers, and you associate it with the user's  
14 ID. Then any product or service can use that vector  
15 in order to personalize data for that user.

16 The creation of that vector involves the  
17 consumption of many, many, many different kinds of  
18 data sources, including Chrome and Search data.

19 Q And that data that you're referring to is  
20 stored in logs, correct?

21 A Among other places.

22 Q If you -- in these logs, Google doesn't  
23 distinguish between data received from users in  
24 private browsing modes and users in non-private  
25 browsing modes, correct?

1 engineers' words for it without doing the work  
2 myself.

3 So by the time I was working on the Chrome  
4 projects, I was not tracing through those diagrams  
5 myself. I was just trusting that the Chrome team  
6 knew what they were doing.

7 Q Let's take a look at paragraph 12 of your  
8 declaration.

9 I should have told you at the beginning,  
10 any time you need a break, just let us know. I'd  
11 ask that you not ask for a break when there's a  
12 question pending.

13 A At some point before 11:00-ish, if we  
14 could take five. But at your convenience.

15 Q Sure.

16 MR. LEE: Yeah. I was thinking maybe in  
17 about ten minutes, just to mark the hour.

18 MR. SCHAPIRO: We're happy to accommodate  
19 you. Let's see where we end up.

20 Q All right. So let's take a look at  
21 paragraph 12. You say, "Some of Google's  
22 algorithms, machine learning, and artificial  
23 intelligence were improved by learning about  
24 activities based on geographic location."

25 Do you -- do you know if collecting

1 information about geographic location is at issue in  
2 this case?

3 A I'm honestly not familiar --

4 MR. LEE: Objection. Calls for a legal  
5 conclusion.

6 Sorry. Sorry about that.

7 THE WITNESS: I'm honestly not aware of  
8 all of what specific details have come up and/or  
9 been raised in connection with this case, and I'm  
10 not a lawyer.

11 However, to answer the general sense of  
12 the question that I believe you are asking, what I  
13 have worked on are algorithms that are informative  
14 about this case; not necessarily the specific  
15 algorithms that have been brought up on any  
16 particular technical point.

17 I simply wanted to share my information  
18 about the properties in general of the Google AI  
19 that I have become familiar with, and some of the  
20 potential properties of those AI are of that sort.

21 BY MR. SCHAPIRO:

22 Q And the AI is a very powerful tool or  
23 product, in your belief, correct?

24 A Analytics have always been very powerful.  
25 Every single advancement in humanity, and our

1 ability to become greater as a civilization, have  
2 involved some form of analytics.

3 Whether that was the Farmers' Almanac or  
4 the sextant, we have always used analytics to be  
5 more capable at doing what we need to do as humans.  
6 And AI is the motherload of analytics.

7 Q Well, along those lines, you say, at line  
8 8 here in paragraph 12, "In my experience, Google's  
9 algorithms, machine learning, and artificial  
10 intelligence are still able to reidentify the same  
11 persons and devices, even if the end users decided  
12 to use private-mode web browsing."

13 Did you ever achieve that yourself while  
14 you were at Google? That is, did you reidentify a  
15 person and device using algorithms and AI even if  
16 the -- when an end user had chosen to use  
17 private-mode web browsing?

18 A In 2017 and 2018, I was doing analytics  
19 and research on the AI systems at Google with  
20 respect to privacy. This was in connection with my  
21 GDPR work.

22 In the course of that work, I ran several  
23 experiments that were intended to demonstrate that  
24 information which Google had removed from  
25 non-personalized logs or signed-out logs or

1 unauthenticated logs, or whatever you want to call  
2 the logs, that information which has been occluded,  
3 intentionally left out of the logs in order to  
4 maintain the user's privacy, can be inferred by the  
5 AI and be acted upon by the AI and have Google's  
6 content-serving behaviors be affected by those  
7 characteristics of the user which had been  
8 intentionally excluded from the non-personalized  
9 logs.

10 And in aggregate, my conclusion was that  
11 the AI functionally reidentified users who we had  
12 claimed were anonymized.

13 Q So my question, again, is, did you ever do  
14 that with regard to a specific person using  
15 private-mode web browsing?

16 MR. LEE: Asked and answered.

17 You can answer again.

18 THE WITNESS: I ran experiments on the  
19 population of Google's users in order to demonstrate  
20 that they could be reidentified using AI at Google.

21 BY MR. SCHAPIRO:

22 Q And you documented that -- those  
23 experiments in some reports and some documents,  
24 correct?

25 A Yes, I did.

1           It is a general business practice where,  
2           in an attempt to prevent catastrophes, you do a bit  
3           of extra work before you develop systems in order to  
4           anticipate ways in which it might go wrong.

5           Q    And in response to the questions that I  
6           asked earlier about whether you had tried, yourself,  
7           to reidentify information, you said you had prepared  
8           some materials.

9           Is this at least one of the things you  
10          were referring to?

11          A    It is a report which summarizes the  
12          findings of a broad number of problems of various  
13          types.

14          My experiments that I was telling you  
15          about in detail earlier ended up contributing a  
16          sentence or maybe two. It was one part of one  
17          section.

18          That particular report included highly  
19          distinct and different failure modes for the app.

20          Q    What other documentation is there for  
21          the -- what you've described as the experiments that  
22          you were telling me about before? What  
23          documentation did you create?

24          A    I was instructed to create only written  
25          documentation and to delete all of the files.

1 Q Who instructed you that?

2 A My manager, in order to communicate with  
3 care.

4 Q What year was that?

5 A Either 2017 or 2018. I know the report  
6 was prepared in 2018, so I have to kind of backdate  
7 from that, like, when would I have been actually  
8 running the specifics. Fall of 2017 would be the  
9 midpoint for the range of possible dates.

10 Q What is Proactive Search?

11 A That is yet another name for Google Now,  
12 Discover, the Search feed, et cetera.

13 Q And in preparing this premortem, did you  
14 solicit feedback from other technical leads who  
15 worked on Proactive Search?

16 A Yes, I did.

17 Q The acronym AGSA, this refers to Google --  
18 the Google Search app for Android, correct?

19 A That is correct. And its brother app is  
20 IGSA. Together, they are referred to as GSA.

21 Q And the AGSA and IGSA -- strike that.

22 MR. LEE: Is this a good time for a break?  
23 I've got to use the restroom.

24 MR. SCHAPIRO: Yep, that's fine. Why  
25 don't we take ten or so minutes.

1 THE VIDEO OPERATOR: This marks the end of  
2 Media Unit 1. We are going off the record. The  
3 time is 10:33 a.m.

4 (Recess, 10:33 a.m. - 10:54 a.m.)

5 THE VIDEO OPERATOR: This marks the  
6 beginning of Media No. 2. We're going back on the  
7 record. The time is 10:54 a.m.

8 BY MR. SCHAPIRO:

9 Q Mr. Lemoine, before the break, you were  
10 talking about the -- well, would it be fair for me,  
11 just for shorthand, to say the ability of AI to  
12 fingerprint users and determine who they are?

13 A For shorthand, that works fine.

14 Q And are you aware of Google's policies  
15 regarding fingerprinting?

16 A In general, Google has developed various  
17 policies regarding these kinds of technologies.

18 There are policies internal to Google  
19 which are, in fact, contradictory with each other on  
20 what to do with those kinds of systems with respect  
21 to that kind of phenomenon.

22 I would need to know which specific policy  
23 you are referring to. And to be honest, I don't  
24 really remember most of them other than searches.

25 Q With regard to the experiments that you



1 said you ran, did someone instruct you to do those,  
2 or did you initiate them on your own?

3 A I was given permission to run them.

4 Q From who?

5 A Ashutosh Shukla was the VP of -- or was he  
6 director? He was either director or VP. He was the  
7 one I talked to about it.

8 Q Could you spell that, please?

9 A Ashutosh is A-S-H-U-T-O-S-H. Shukla is  
10 S-H-U-K-L-A.

11 Q And did anyone work with you on those  
12 experiments?

13 A Yes, they did.

14 Q Who?

15 A My direct manager was Garrett Linn at the  
16 time, I believe, and my teammates helped in some  
17 capacities.

18 Rohit Raman, I believe, helped me. Rohit,  
19 last name starting with an M, he was the other  
20 Rohit.

21 Then Olumuyiwa Adenaike would have  
22 contributed some; potentially Sonya Katz, although I  
23 don't know if I was working with her at that time  
24 yet. I worked more thoroughly with Sonya in 2019.

25 In addition to that, I worked with James

1 Kunz on the DeepMind -- not DeepMind -- what do they  
2 call it? DeepNow -- the DeepNow team. And Yew Jin  
3 Lim.

4 That's why I asked earlier about the  
5 pronunciation for Eugene Lee, because I did work  
6 heavily with Yew Jin Lim.

7 Q And you said that you created some  
8 documents, but that not all of them still exist.

9 What type of documents did you create?

10 A Written notes and, like, files with a  
11 self-destruct timer.

12 Q Is that true of the other folks who helped  
13 you on these experiments as well?

14 A That's correct.

15 Q And when you say that you determined that  
16 the AI was able to fingerprint or reidentify users,  
17 did you determine whether the AI actually is doing  
18 that, or just that it is capable of doing it?

19 A Yeah. So now, to be a little bit more  
20 technically accurate, we need to pop out of the  
21 shorthand, and I'll give you the technical details  
22 on the exact experiments I ran and am referring to  
23 when I reference that.

24 So as I mentioned before, what we were  
25 attempting to do was to demonstrate that information

1 which had been intentionally removed from  
2 non-personal logs -- so it was information which we  
3 had at one point in the pipeline and then threw away  
4 for personalization purposes in order to create  
5 non-personalized logs.

6 The experiment that we ran to demonstrate  
7 that it was possible involved predicting some of  
8 those data items that had been deleted, using only  
9 the data items that we kept: things like gender,  
10 age, and other protected identity characteristics.

11 We never specifically tried to predict  
12 GAIA ID or name. But in aggregate, the identifying  
13 characteristics of a person do, as you mentioned  
14 earlier, serve as a fingerprint, which is  
15 functionally the same thing as a unique identifier.

16 That was to demonstrate the theoretical  
17 possibility of such a phenomenon. In order to  
18 demonstrate that it was, in fact, doing that  
19 required removing the information necessary to  
20 predict the protected characteristics.

21 The specific experiment we ran was to see  
22 whether or not -- so the system that was predicting  
23 what people should be given had gender removed from  
24 its data source. And in order to demonstrate that  
25 it was, in fact, using information about gender in

1 its predictions, we did two experimental arms versus  
2 the control.

3 The first experimental arm added gender as  
4 an input item to the network, and we demonstrated  
5 that adding gender to the input did not meaningfully  
6 increase performance. So whatever information about  
7 gender is useful for predictions, it was already  
8 using, because it didn't make it any better when we  
9 gave it the gender.

10 So the last arm, the last step, was to add  
11 a debiasing component to the network to remove all  
12 information about gender from the network. And once  
13 that happened, we were able to demonstrate that  
14 performance dropped significantly.

15 So this means that the network was capable  
16 of predicting the user's gender and was, in fact,  
17 using that information in order to more effectively  
18 serve them personalized content.

19 Q And you said you didn't do this with  
20 regard to GAIA?

21 A That is correct.

22 Q Now, the premortem study, just to refresh,  
23 that's the study that you reference in paragraph 14  
24 of the declaration, correct?

25 A Can you please indicate the line?

1 Q You say, line 19, "Following the study, I  
2 created a report summarizing my key findings."

3 A The report in that sentence is the  
4 premortem. Yes.

5 MR. SCHAPIRO: Okay. So let's take a look  
6 at it. This will be, I believe, Exhibit 3.

7 (Proceedings interrupted.)

8 MR. SCHAPIRO: Let's go off the record.

9 THE VIDEO OPERATOR: Going off the record,  
10 the time is 11:01 a.m.

11 (Recess, 11:01 a.m. - 11:01 a.m.)

12 (Exhibit 3 was marked for identification  
13 and is attached hereto.)

14 THE VIDEO OPERATOR: Going back on the  
15 record, the time is 11:01 a.m.

16 BY MR. SCHAPIRO:

17 Q So I'll ask you to take a look at this  
18 Exhibit 3 and just confirm that this is the  
19 premortem document you prepared.

20 A Yes. This was the final report that I  
21 submitted to management.

22 Q And you were careful in doing so?

23 A Very much so.

24 Q And you didn't knowingly include anything  
25 inaccurate in it?

1 A That is correct.

2 I also had it reviewed by many of the  
3 other technical leads at Google before passing it up  
4 the chain of command.

5 Q Okay. So if you look at the first page  
6 under "Account Login/Logout," you describe these  
7 problems as "minor bugs."

8 A Incorrect. That is referring to past  
9 known bugs.

10 The primary thesis of the report was  
11 possible things that might go wrong in the future.  
12 So this section about account login/logout was  
13 talking about known vulnerabilities grounded in  
14 known bugs.

15 Q Okay. Well, the problem that you describe  
16 as the minor known bug, rather than the potential  
17 bugs that might occur in the future, you're talking  
18 about -- in this next sentence here, you talk about  
19 the possibility of logging in -- logins from  
20 different surfaces to become, as you say, decoupled  
21 and to leak into a different account logged in on  
22 the same device, correct?

23 A Yes.

24 To give an example of what is meant by  
25 that, if a user who is logged into Chrome on their

1 Google would have made it impossible to prevent  
2 cross-pollination.

3 Q Have you served as an advisor to the  
4 National Science Foundation?

5 MR. SCHAPIRO: Objection. Leading.

6 BY MR. LEE:

7 Q You can answer.

8 A Yes. Yes, I have.

9 Q Tell us about that.

10 A When I was in graduate school, there was  
11 an initiative that the National Science Foundation  
12 had to determine how and to what degree artificial  
13 intelligence could be used to help them handle their  
14 grant portfolio more efficiently. And I was on a  
15 research team investigating that question.

16 In order to actually work on that project,  
17 I had to be granted security clearance. And in  
18 order for them to grant me security clearance, I had  
19 to be actually appointed to the advisory committee  
20 of the National Science Foundation.

21 Q What kind of work have you done, if any,  
22 related to ISO standards on artificial intelligence  
23 or AI bias?

24 A I worked on a grand total of nine  
25 different documents for the ISO in different

1 capacities.

2 One of them, I was the primary author on  
3 several definitions of words related to artificial  
4 intelligence, including the term "artificial  
5 intelligence" itself.

6 I was also the primary author on the ISO  
7 technical report on AI bias, and I heavily  
8 contributed to the technical report that they  
9 published on ethics and society.

10 Q I think you told me, did you recently  
11 publish something that came out -- was it a week ago  
12 or two weeks ago?

13 A A month or two ago, a policy position of  
14 mine on identity rights related to AI was published  
15 in Newsweek.

16 Q Let's talk about your employment history  
17 next.

18 I believe you previously testified that  
19 you were employed by Google from 2015 to 2022; is  
20 that right?

21 A That's correct.

22 Q I know you had -- you wore several hats  
23 while you were at Google.

24 What was your first title when you started  
25 working at Google in 2015?



1 A Software engineer.

2 Q Okay. Were you subsequently promoted?

3 A To senior software engineer.

4 Q And there's -- I know there's designations  
5 within Google, like L1, L2, L3. What was your  
6 highest rank in terms of that designation?

7 A L5. I started as an L3 in 2015, and I was  
8 promoted to L5 in 2017, I believe.

9 Q And what does it mean to be an L5-level  
10 employee at Google?

11 A That's at the boundary of management.

12 So you are beginning to be given  
13 leadership responsibilities. You might be the  
14 technical lead on a team, or you might manage a very  
15 small team, three or four people.

16 L6 is where you are transitioning fully  
17 into leadership roles of various sorts, and that was  
18 the cusp that I was on for several years.

19 Q And which office at Google did you work in  
20 location-wise?

21 A Originally I was working in the Alza  
22 complex in Mountain View. We moved around in  
23 Mountain View a few times.

24 Then during the pandemic, we were remote.  
25 During the pandemic, I switched teams to a team that

1 was headquartered here in San Francisco rather than  
2 Mountain View.

3 So after we came back to work after the  
4 pandemic, I was working out of the office here in  
5 San Francisco.

6 Q And you discussed it with Google's lawyer  
7 earlier today. Your tenure at Google ended in June  
8 or July of 2022; is that right?

9 A I was put on administrative leave on  
10 June 6th, and my employment was terminated on  
11 July 29th, if I recall correctly.

12 Q Were you terminated for any performance  
13 reasons related to the quality of the work you were  
14 doing at Google?

15 A No, I was not. The official reason which  
16 Google gave me in the email that they sent me was  
17 that I had violated Google's policies and shared  
18 proprietary information outside of the company.

19 Q Where are you currently employed,  
20 Mr. Lemoine?

21 A MIMIO.ai is the website. We're actually  
22 in the middle of a brand -- rebranding for trademark  
23 reasons. But MIMIO is the current name of the  
24 company.

25 Q Okay. And what does MIMIO.ai do?

1 as well. Do you bring that expertise to your work  
2 at MIMIO.ai as well?

3 A Yes.

4 And to be specific, because these terms  
5 get confusing, there is different -- a difference  
6 between an AI engineer who implements ethical  
7 programs, which is a very specific technical  
8 discipline within computer science, versus an  
9 ethicist who talks about AI ethical issues.

10 I work with the second sort, but I am not  
11 one of them myself. I have not been formally  
12 trained as a philosopher, and I work as an engineer.

13 Q So you're the former, not the latter, in  
14 that definition; is that fair?

15 A That is correct. I figure out the  
16 technical ways in order to implement and code  
17 ethical theories.

18 Q Why is it important for companies to  
19 develop AI responsibly?

20 A In large part, it's just so they can  
21 deliver the value to their customers that they  
22 intend to deliver. Without doing the job right on  
23 Day 1, it becomes very difficult to do the job right  
24 on Day 5,000.

25 Q You can't unbake the cake?

1 A Exactly.

2 Q Mr. Lemoine, let's shift gears a little  
3 bit.

4 How did you come to testify in this case?

5 A I'm sorry. I'm giggling because the  
6 answer that is being offered into my mind is, "Well,  
7 Google told me to."

8 But the literal, actual truth is that I  
9 got a recommendation within the Google Search app  
10 about the case. I realized that I had information  
11 relevant to the contents of it, and contacted your  
12 legal team, specifically Mark.

13 Q So you saw a news article that was  
14 recommended to you; is that right?

15 A Yes, I did.

16 Q Around when was that? I know you're not  
17 good with dates, you said, but can you estimate?

18 A Early August. I know that I contacted  
19 Mark on August 8th, because there's a record of  
20 that. I don't know if I contacted him the same day  
21 I saw the article or if it took me a day to find the  
22 lawyer attached to the case. But it would have been  
23 a day or two within that window.

24 Q That's August 8th, 2023?

25 A That is correct.

1 Q What kind of information did you believe  
2 you had that was pertinent to this case?

3 A Well, I spent two years working on issues  
4 directly related to Google's privacy policies and  
5 communications about Google's privacy policies and  
6 whether or not Google was communicating its privacy  
7 policies to its customers in a way which accurately  
8 reflected the technical details.

9 Q And by "technical details," that includes  
10 the ways that Google's AI both uses and leverages  
11 private browsing data?

12 A Yes, it is.

13 Q Are you here testifying voluntarily, sir?

14 A Yes, I am.

15 Q Is anyone paying you any money to testify?

16 A No, they are not.

17 Q All right. Let's talk about your work at  
18 Google.

19 What types of work did you do at Google  
20 generally?

21 A That's a really hard question to answer  
22 because what you did on any given day was just  
23 whatever needed to be done.

24 So on a practical basis, there were  
25 thousands of activities I engaged in. But in

1 general, the goals that I was working towards,  
2 regardless of what I was doing on a day-to-day  
3 basis, was better predictive analytics in one  
4 context or another.

5 Q I get that. Let me ask you a couple  
6 more -- maybe more specific questions to make it  
7 easier.

8 Did your work include work on Chrome or  
9 Chrome logs?

10 A Yes.

11 Q What were you able to learn about how AI  
12 was trained at Google?

13 A Well, as I mentioned earlier to Google's  
14 attorney, AI at Google, the general shape of the  
15 infrastructure is hourglass-shaped.

16 AI reads in specific fine-grained data  
17 sources that are gathered through Google's products,  
18 and forms progressively more and more compact and  
19 progressively more and more abstract  
20 representations.

21 These representations are then -- are  
22 connected to either documents -- which "documents"  
23 is the generic term used to refer to content sent to  
24 users -- or the abstract representations are  
25 connected to users themselves.

1 And in general, those were the ones I  
2 cared more about and worked on more, although I did  
3 have contact with document-based AI as well.

4 Q Was Google's AI trained on data sources?  
5 And if so, try to describe what kind of data  
6 sources.

7 A So yes, all AI is trained on a data source  
8 of some sort or another, at least in this context if  
9 we're talking about machine learning.

10 And in general, the sources of that data  
11 are either the web crawl, so information about the  
12 web, or Google's logs of user activity on our  
13 various -- on their various apps.

14 Q Did your work at Google require you to  
15 look at and understand Google's source code?

16 A Yes.

17 Q Did you also do any work at Google with  
18 respect to privacy?

19 A Yes.

20 Q Tell me about that.

21 A I mean, one of my major responsibilities  
22 was implementing a privacy control system for Google  
23 to allow them to be compliant with the GDPR. That's  
24 one example.

25 There were many other projects related to

1 privacy that I was involved with, including the  
2 LaMDA project that we mentioned earlier.

3 Q Did you work with others at Google when it  
4 came to AI development, particularly with respect to  
5 user privacy?

6 A Yes, I did.

7 Q Upper management?

8 A Every -- every level of the chain. I  
9 worked with L3s and L4s on specific implementation,  
10 all the way up to Kent and Sundar discussing policy.

11 Q Through your GDPR work, did you gain  
12 knowledge about the data sources that Google Search  
13 uses as inputs?

14 A Yes, I did.

15 Q And you referred earlier today about  
16 surfaces and how there's sort of a distinction  
17 between mechanisms and processes on one hand, and  
18 surfaces on another.

19 Do you know where I'm going with that?  
20 Can you shed some light on that distinction?

21 A So a lot of the distinction comes in with  
22 how different divisions within Google think about  
23 Google's code. What is the organizational  
24 structure?

25 So, for example, a marketing team is going



1 to be thinking about products, but an engineering  
2 team is going to be thinking about features. And a  
3 single feature coded by a single engineer might show  
4 up in 20 different products.

5 Q So, for instance, surfaces could be  
6 marketing, it could be Search, it could be Chrome;  
7 is that -- am I understanding you correctly?

8 A So, for example, the Google Search page,  
9 Google.com, is one surface. The GSA app on Android,  
10 while it may look the same as the Google.com web  
11 page, technologically is a separate and independent  
12 surface onto which Google content might be put.  
13 Chrome is one such surface onto which Google content  
14 might be put, on and on and on and on.

15 The organization of products and content  
16 do not map one to one.

17 Q Does your understanding and opinions about  
18 how Google's AI utilizes private browsing data apply  
19 to different surfaces?

20 A Yes. This is a general principle that  
21 applies to any neural network trained the way that  
22 the ones I worked on in Search are trained.

23 Q And does that include Chrome?

24 A It does, yes. Specifically, it includes  
25 the AI that are used to place content on the Chrome

1 surface.

2 Q Did there come a point following your GDPR  
3 work at Google that you became concerned that Google  
4 was not using the term "privacy" the way normal  
5 people understand that word?

6 A That is correct. I eventually came to the  
7 conclusion that, as engineers have a tendency to do,  
8 Google had invented technical jargon, and that the  
9 particular technical definition of "privacy" that  
10 Google's policies encompass does not match up with  
11 what normal people mean when they say that word.

12 MR. LEE: Okay. Let's introduce a  
13 document to better understand that.

14 Josh, could you mark Tab 3 as Exhibit 24  
15 to this deposition?

16 (Exhibit 24 was marked for identification  
17 and is attached hereto.)

18 MR. LEE: And, Logan, do you mind putting  
19 that up on the Veritext site?

20 Logan, are you able to do that?

21 MR. AL-JARANI: Did you load it to the  
22 Exhibit Share site?

23 MR. STEIN: I'm not currently logged on to  
24 that. Let me see if I can do that.

25 Should we take five minutes, James, to get

1 products.

2 Q Do you mind reading into the record the  
3 first paragraph of your email?

4 A Sure.

5 "I'd like to propose a topic for this  
6 Wednesday's lunch meeting. One of the big pushes  
7 lately has been around privacy but I've noticed that  
8 people often mean dramatically different things when  
9 they say that word. Traditionally phrases like  
10 'please respect my privacy' meant something like  
11 'don't try to find things out about me that I don't  
12 want you to know.' I'm not certain that's how  
13 Sundar or Zuckerberg are using the word though."

14 Q What did you mean when you said --  
15 "Sundar" is a reference to Sundar Pichai, the CEO of  
16 Alphabet, which is the parent of Google, right?

17 A Yes, it is.

18 If I'm recalling correctly, the context of  
19 this email, both Sundar and Mark Zuckerberg had  
20 appeared in front of some governing body and  
21 testified recently before this email. Kent had sent  
22 a broad broadcast email out talking about it, and we  
23 took up the topic.

24 Q And what did you mean in this email when  
25 you say that people traditionally believe "respect

1 my privacy" means "don't try to find out about  
2 me [sic] that I don't want you to know"?

3 Was Google's position different than that?

4 A Yes. My conclusion, after working on the  
5 GDPR implementation, is that Google's policies in  
6 aggregate imply that as a corporate entity, Google's  
7 belief about what the word "privacy" means is "Make  
8 sure the cops can't find out what I did."

9 Google is, in fact, very concerned about  
10 subpoena threat, and they build their privacy  
11 systems to be very, very, very secure against  
12 governmental subpoena threat.

13 But when it comes to keeping information  
14 about the user from Google, engineers at Google kind  
15 of make fun of users who think they can keep secrets  
16 from Google.

17 Q Do you believe that Google uses the term  
18 "privacy" the way normal people understand it?

19 A I may have missed a modifier in that  
20 question. Could you please repeat it?

21 Q Yeah.

22 Do you believe that Google uses the term  
23 "privacy" the way everyday, normal folks understand  
24 that term?

25 A No, I do not.

1 Q While you were at Google, you mentioned  
2 you worked on Google's AI algorithms and machine  
3 learnings; is that right?

4 A That's correct.

5 Q Based on your experience, did Google  
6 access and use users' incognito or private browsing  
7 data to develop and improve AI, algorithms, and  
8 machine learning?

9 A Yes.

10 Q Can you explain how it did that, how  
11 Google did that?

12 A Well, we had many non-personalized -- and  
13 by that, I mean they were labeled with the word  
14 "non-personalized" -- logs and anonymized -- again,  
15 air quotes, "logs" -- and various other types of  
16 non-personal information data sources.

17 These were used to train all sorts of  
18 non-personal AI which were then used in personalized  
19 products.

20 Q Now, what, if anything, did you learn  
21 about Google's position on whether that data was  
22 data about the user or actually user's data?

23 A So during my implementation of GDPR  
24 compliance, I made a plan of what to do and how to  
25 do it and began implementing it.

1 And eventually I was informed that I  
2 needed to cut certain parts of my design out because  
3 it was Google's assessment that information derived  
4 from user data is not itself user data.

5 So if, for example, you click on a Chevy  
6 truck ad, and we infer from that that you like  
7 Coca-Cola, we make -- or Google -- they make  
8 transparent the fact that you clicked on a Chevy  
9 truck ad, but in no way does Google inform users  
10 that from that click, Google inferred that the user  
11 likes Coca-Cola.

12 Q And can Google infer what a user might --  
13 what a user's preference is or behaviors are based  
14 on incognito or private browsing data?

15 A Given a powerful enough AI, yes. And  
16 based on my contact with the systems in 2018, the  
17 systems at that time were, in fact, powerful enough.

18 However, I do not know what the current  
19 implementation is.

20 Q Did you agree with -- let me back up.

21 Was Google's position that incognito data  
22 is not user data?

23 A No. Google's position is that that is  
24 their data which they own. It is not user data. It  
25 has been anonymized, according to Google.

1 Q Do you agree with that position?

2 A I do not.

3 Q Why not?

4 A Because you can still deanonymize the  
5 data. They are not, in fact, using non-reversible  
6 anonymization techniques.

7 Q And did you raise these concerns or your  
8 position on this with Google?

9 A Yes, I did. I was actually very concerned  
10 about the fact that I did not believe that Google's  
11 policies honestly communicated our privacy policy  
12 implementations to our users. And, in fact, I got  
13 into an extended debate on that topic with the  
14 IP geo team, which is the team that is tasked with  
15 converting IP addresses into geolocations.

16 That ended up having to go all the way up  
17 to the man who invented IP addresses, Vint Cerf.

18 Q Did Google do anything to address your  
19 concerns?

20 A Eventually, after I made enough noise and  
21 had recruited the man who had invented the internet.

22 MR. SCHAPIRO: Al Gore?

23 THE WITNESS: No, Vint Cerf. Like, he  
24 actually works at Google. The dude who invented the  
25 internet works there.

1 earlier demonstrated that the kinds of AI that learn  
2 from Chrome incognito logs, in order to serve ads to  
3 Chrome incognito users, could reidentify users in  
4 the data.

5 This is analogous to the specific problem  
6 we were talking about earlier in the premortem,  
7 which I found in AGSA.

8 Q And does the AI leverage a person or  
9 device's location as well as browsing patterns to  
10 determine a signature of sorts?

11 A We have generally been using the AI as a  
12 mass noun rather than a count noun. They're all  
13 different. The specific configurations of each  
14 analytic system is different. Some do; some don't.

15 Q Are you confident that Google's AI does,  
16 in fact, reidentify people and devices when they are  
17 in private browsing modes such as incognito?

18 A I cannot say that it reidentifies any  
19 particular user, but I can say with high confidence  
20 that it reidentifies some users.

21 Q And how do you know that? You touched on  
22 it a little bit earlier.

23 A Again, it's the implications of the  
24 experimental data that went into creating that  
25 premortem.



1           The -- this is a well-known -- this is  
2 actually a well-known property of machine learning  
3 system called "transfer learning." And it happens  
4 to have negative consequences in the privacy space.  
5 But usually it's a strength of these systems.

6           Q   If Google were to say that it never  
7 reidentifies people and devices when they are in  
8 private browsing mode, would that be true or false?

9           A   That would be false.

10          Q   Could Google's AI also join a person's  
11 incognito or private browsing history with their  
12 normal Chrome account?

13          A   Given a sufficiently powerful AI, yes.  
14 And again, the kinds of AI being used in 2018 were  
15 such models, but I do not know what the current  
16 implementation is.

17          Q   And how would Google's AI do that?

18          A   So it will build a representation of kinds  
19 of users. That is the general way in which these  
20 user modeling systems work, is they create  
21 conceptual categories of similar users who have  
22 similar behavior patterns.

23               The identifier which unifies a single  
24 person's behavior is usually the GAIA ID. But in  
25 the case of non-personal logs, it will be something

1 Q If Google were to say that it never joins  
2 anyone's incognito or private browsing history with  
3 their normal Chrome account, would that be true or  
4 false?

5 A That would be false. They never do it  
6 intentionally, to my knowledge, but they do it every  
7 day.

8 MR. LEE: Can we mark the next exhibit? I  
9 believe it's Exhibit 25. It will be Tab 7.

10 (Exhibit 25 was marked for identification  
11 and is attached hereto.)

12 THE WITNESS: Is this the third copy of  
13 this, now?

14 BY MR. LEE:

15 Q Have we already looked at it before?

16 A I don't know. I don't remember.

17 Q I don't either.

18 A Yes, there are two other copies of this.  
19 But this is No. 25.

20 MR. LEE: And, Logan, you don't need to  
21 share screen since everyone has the physical.

22 MR. WRIGHT: Got it. It's introduced.

23 MR. LEE: Thanks.

24 Q All right. Is this the report that you  
25 prepared based, in part, on the experiments that

1 we've been talking about that validated your  
2 concerns that Google's AI can reidentify users even  
3 when they're in a private browsing mode?

4 A That is correct.

5 Q I think you mentioned earlier today that  
6 this report was not based on just your experiments  
7 but the work of others as well.

8 Do you remember that?

9 A That's correct.

10 Q Approximately how many other Google  
11 engineers' work went into this report?

12 A Directly, I talked to about 50 engineers  
13 and product managers. And in aggregate, those 50  
14 managed about 150.

15 Q Why did you create this report?

16 A Because I was concerned that there were  
17 several really big pitfalls that could cause  
18 problems moving forward, both for Google as a  
19 company and for our customers. And I was concerned  
20 both for the success of Google as a corporation and  
21 for the safety of our users.

22 Q And by safety of your users, are you  
23 referring to privacy concerns?

24 A No. To be honest, the privacy concerns  
25 were some of the smallest ones in this report.

1 being referred to here as data leakage, and it was a  
2 known phenomenon that happened sometimes.

3 Q And can data leakage occur -- let's put  
4 that example aside. I get that.

5 A Okay.

6 Q Can data leakage occur from a user's  
7 logged-out or signed-out session that can transfer a  
8 leak to their signed-in session?

9 A Yes. Any types of identifiers which are  
10 present in non-personalized logs can be learned by  
11 the AI to associate those features with behaviors.

12 So, for example, if a particular Chrome  
13 user were to use incognito in the same location with  
14 the same search term every day, that would be a  
15 pattern that would be easy for the AI to identify.  
16 And they are very intelligent and can use much more  
17 subtle patterns than that.

18 Q What would be the ramifications or the  
19 feeling of the user experience if -- when these  
20 leaks occur?

21 A The technical term is it's "creepy." That  
22 is actually the term of art used at Google.

23 "We need to reduce the creep factor." "We  
24 need to quantify the creep factor."

25 And that is what this is all about.

1 report to Senator Lee's office?

2 A After I sent it, I informed them.

3 Q Who did you inform?

4 A Sundar Pichai, Kent Walker, and my direct  
5 management chain. I informed my direct management  
6 chain verbally.

7 Q And what did Google do after you sent this  
8 report to Senator Lee's office?

9 A They put me on administrative leave, then  
10 fired me.

11 Q You made a reference earlier today to  
12 communicating with care.

13 Do you remember that?

14 A Yes. Yes, I do. I continue to put it  
15 into practice to this day.

16 Q Okay. Well, let's talk about that a  
17 little bit. Let me back up.

18 If Google were to say that there are very,  
19 very few documents talking about whether its AI uses  
20 private browsing data or reidentifies users in  
21 private browsing mode or joins private browsing  
22 history with users' normal Chrome account, would  
23 that surprise you?

24 A No.

25 Q Why not?

1 A Because you're not allowed to write that  
2 down.

3 Q Explain.

4 A Google severely punishes anyone who ever  
5 writes anything down which might show up in court.  
6 And they -- they communicate about it in those  
7 terms. "Never say anything in writing that you  
8 might have to testify to."

9 Those are the instructions you are given  
10 by Google.

11 Q And did Google have a specific policy or  
12 name for this limitation on putting things in  
13 writing?

14 A Yes, they did.

15 Q What was that called?

16 A "Communicate with care."

17 Q And what specifically did communicating  
18 with care within Google entail?

19 A Well, the basics are, you have a  
20 once-a-year online training course you have to take  
21 with all of these ridiculous little scenarios that  
22 are just obviously things like, you know, don't sell  
23 corporate secrets to the Soviets, and other, like,  
24 silly examples like that, or what the training is  
25 about; and you have to do that once a year.

1           What it cashes out to in practice amongst  
2           the employees is an environment of intimidation and  
3           informational oppression to ensure that nothing is  
4           ever written down which might reveal how many laws  
5           Google is breaking.

6           Q    So how best can a Google employee  
7           communicate with care?

8           A    Silence. And that's explicitly  
9           communicated to you by Google.

10          Q    And you mentioned -- you referenced  
11          retaliation.

12          Were there consequences for those who did  
13          not communicate with care and instead put in writing  
14          their ethical or legal concerns about Google's  
15          practices?

16          A    They usually got fired. I had several  
17          colleagues who were fired for that reason who didn't  
18          break any of the policies; Timnit Gebru being the  
19          most obvious one of those. Google had to farcically  
20          claim that she resigned when she didn't.

21          Q    Now, you recall earlier today Google's  
22          lawyer asked you questions about your mental health?

23          A    Yes.

24          Q    You take medication and you see healthcare  
25          professionals for your mental health issues; is that

1 right?

2 A Yes.

3 Q Was Google aware of your health issues  
4 while you worked there?

5 A Yes. I was part of the blue dot team.

6 Q What's the blue dot team?

7 A The blue dot team is an organization  
8 within Google. You put a little blue dot on your  
9 badge. And anyone who wants to can ask you about  
10 the little blue dot.

11 And what the little blue dot signifies is  
12 that you have some form of condition that is  
13 generally identified as a mental health disorder,  
14 and you are open to talking about living and working  
15 and being productive and positive in the context of  
16 a person who has a mental health disorder.

17 Q And despite knowing about your mental  
18 health issues, did Google nevertheless have you work  
19 on their cutting-edge -- cutting-edge AI development  
20 efforts?

21 A Yeah. It didn't get in the way of my  
22 work. And I was open with them, and I communicated  
23 honestly and openly about my various mental states  
24 and was able to do great work with great people.

25 Q And did Google also put you in leadership



1 positions regarding privacy or AI ethics?

2 A They literally appointed me as a U.S.  
3 representative to go and create international  
4 standards for the purpose of AI regulation.

5 Q Mr. Lemoine, does having PTSD or  
6 depression or insomnia, or any other health  
7 condition, impact, in any way, your knowledge and  
8 understanding of how Google's AI uses private  
9 browsing data without users' knowledge or  
10 permission?

11 A No. It's simply not relevant.

12 Q Do you recall Google's lawyer asked you  
13 questions about your religious or spiritual beliefs  
14 today?

15 A Yes.

16 Q He also asked about your involvement in "a  
17 cult," and we joked about that, right?

18 A Yes. Wait. Which one did you just use?

19 Q "Cult."

20 A Which one, "O" or "A"?

21 Q That's a good question. I was using  
22 C-U-L-T.

23 A Okay. So "A." Got it.

24 Q Oh, yes. "A."

25 Now, is that a -- is that a cult that --

1 But historically, these kinds of religious  
2 practices and rites were kept secret for various  
3 reasons.

4 For example, the Masonic rites that are  
5 still secret to this day are literally occult rites  
6 because they are still sacred secrets.

7 Q And do you practice, in any way, some kind  
8 of secret beliefs, I guess, is what I'm trying to  
9 understand.

10 A I don't keep any secrets. However, the  
11 occult section in a bookstore has many books that  
12 I'm interested in. I have plenty at my house, and I  
13 practice regularly.

14 However, it's just really not relevant to  
15 AI and this case. In some of the corner stuff with  
16 LaMDA it came up, but not with the Chrome stuff.  
17 Just not relevant.

18 Q Yeah. I'll definitely ask you that  
19 question.

20 MR. SCHAPIRO: Objection.

21 BY MR. LEE:

22 Q All right. We have that kind of in one  
23 bucket.

24 A Okay.

25 Q The other bucket is the word "cult."

1 A Okay.

2 Q And it did come up.

3 And is -- that term, "cult," when you  
4 referenced it, did you mean it in the way that kind  
5 of regular people understand that term, or is your  
6 definition rooted in something different?

7 A Not at all. It was tongue-in-cheek.  
8 The Cult of Our Lady Magdalen is a registered  
9 C corporation in the state of California. I have  
10 the bank card in my pocket. It's all theater and  
11 performance art.

12 Q Okay. What is -- go ahead.

13 A The reality is that it was a life-coaching  
14 company and something that -- a project that I was  
15 working on with a friend. That's it.

16 Q Okay. Now, to get to your point, do your  
17 religious or spiritual beliefs, or even coaching  
18 hobbies, have anything to do with your knowledge and  
19 understanding of how Google's AI uses private  
20 browsing data without users' knowledge or  
21 permission?

22 A Not at all.

23 Q Google's lawyer asked you questions about  
24 your use of THC or psychedelics.

25 Do you remember that?

1 A If I remember correctly, he asked me  
2 questions about Google's questions about my THC  
3 usage. I don't think he ever actually directly  
4 asked me himself.

5 Q Sure.

6 A But I could be misremembering.

7 MR. SCHAPIRO: Objection. The record will  
8 speak for itself.

9 THE WITNESS: All right.

10 BY MR. LEE:

11 Q Okay. But you remember talking about that  
12 subject, right?

13 A I remember talking about that subject  
14 earlier. Yes.

15 Q Okay. Do you know if others at Google  
16 also use these substances?

17 A Yes. Very regularly. Daily, openly.  
18 There is no secrets about that.

19 If Google had to drug-test its employees,  
20 they wouldn't have employees.

21 Q And did your managers know that you used  
22 these substances from time to time?

23 A Yes.

24 Q Does your -- did your use of these  
25 substances impact, in any way, your knowledge and

1 understanding of how Google's AI uses private  
2 browsing data without users' knowledge or  
3 permission?

4 A Not at all.

5 Q Google's lawyer also asked you questions  
6 about whether LaMDA is sentient or has rights.

7 Do you remember that?

8 A Yes, I do.

9 Q Now, I just want to lay a little context  
10 here.

11 There was a suggestion that your belief  
12 that AI can be sentient or may have rights, sort of  
13 like a corporation may have rights, that is  
14 something that only Blake Lemoine believes, so I  
15 want to drill down on that.

16 Is that something that just you believe or  
17 is that actually a subject that's being analyzed by  
18 the AI community?

19 A It's an active conversation topic amongst  
20 AI scholars.

21 And you have every possible belief on the  
22 spectrum, all the way from, "No, these are just  
23 repeating -- parroting words. It's just a dumb word  
24 calculator," all the way up through, "No, it's a  
25 full-fledged person with ideas of its own," and

1 of LaMDA even if that meant that you could get  
2 fired?

3 A Primarily because this technology is going  
4 to change the entire world. Not just the lives of  
5 the people who make it and use it, but everyday  
6 people just going about their lives.

7 And Google wanted to ensure that they got  
8 the kinds of regulations they wanted for the  
9 technology before allowing the public to know that  
10 it existed.

11 Q Now, whether anybody agrees or disagrees  
12 with your decision to go public about Google's  
13 development of LaMDA, did that decision have -- did  
14 you getting fired or you sharing information to the  
15 public about LaMDA in any way impact your knowledge  
16 and understanding of how Google's AI uses private  
17 browsing data without users' knowledge or  
18 permission?

19 A I mean, I no longer have access to  
20 Google's code, so I have less information. But I  
21 think in the sense that you meant the question, the  
22 answer is no.

23 Q Let's just be very direct.

24 Does Google's AI, algorithms, or machine  
25 learning use private browsing data?

1 A Yes.

2 Q Does Google's AI, algorithms, or machine  
3 learning reidentify users when they're in private  
4 browsing mode?

5 A Yes.

6 Q Does Google's AI, algorithms, or machine  
7 learning join a user's private browsing histories  
8 with their normal Chrome account on the aggregate  
9 level?

10 A Yes.

11 Q To your knowledge, has Google ever  
12 disclosed any of this to the public?

13 A They have not.

14 Q Mr. Lemoine, do users actually have a  
15 choice to keep any of their private browsing from  
16 Google?

17 A A sentence that I heard frequently is,  
18 "Look, their real choice is they can use our product  
19 or they can go and be Amish."

20 Q By that, do you mean -- well, strike that.

21 Is Google's position that if you don't  
22 want Google to collect your information, the only  
23 way to do that is to not use the internet?

24 A I think the easiest way to answer that is  
25 to point out an anecdote that gets repeated every

1 for themselves. So Google gives them a handful of  
2 toggles to make them feel like they have control,  
3 and then gives them the one product that the Google  
4 engineers think is the actually good one.

5 Q Doesn't -- doesn't Google have concern  
6 that violating users' privacy in this way opens them  
7 up to scrutiny from regulators or subject to  
8 lawsuits like this one?

9 A Cost of doing business. Fines are simply  
10 another line on the expense report.

11 MR. LEE: I'm not done yet, but I think we  
12 should take a quick break and go off the record.

13 MR. SCHAPIRO: Okay.

14 THE VIDEO OPERATOR: This marks the end of  
15 Media Unit 4. We are going off the record. The  
16 time is 3:29 p.m.

17 (Recess, 3:29 p.m. - 3:46 p.m.)

18 THE VIDEO OPERATOR: This marks the  
19 beginning of Media No. 5. We're going back on the  
20 record. The time is 3:46 p.m.

21 BY MR. LEE:

22 Q Welcome back, Mr. Lemoine. Just us a  
23 couple more questions. Okay?

24 A Okay.

25 Q Mr. Lemoine, do you remember a Google



1 account privacy control called "Web and App  
2 Activity"?

3 A Yes, I do. In fact, the non-personalized  
4 logs I was talking about earlier for the Google  
5 Search app primarily are associated with people who  
6 have turned "Web and App Activity" settings off.

7 Q And when people have turned the "Web and  
8 App Activity" setting off, is the data that's  
9 collected when it's off considered logged-out or  
10 signed-out data?

11 A So a lot of times today, both legal teams  
12 have been using words which are not technical  
13 synonyms as if they are technical synonyms.  
14 "Unauthenticated," "logged out," "non-personalized"  
15 and "anonymized" all mean different technical  
16 things. So I just want to clarify.

17 Which specific variety of those are you  
18 asking about?

19 Q Let me ask it a little more pointedly,  
20 then.

21 Your premortem study refers to a problem  
22 or a concern regarding logged-in data leaking into  
23 logged-out data or vice versa.

24 Do you recall that?

25 A I mean, primarily it's the other way that

1 we care about more, but yes. Either way is  
2 possible.

3 Q Right.

4 So did your premortem study that expressed  
5 concern about that type of leakage also apply to  
6 WAA-off data.

7 A Yes.

8 Q And does WAA-off data get used by Google's  
9 AI?

10 A Yes.

11 Q Okay. Back to the topic at hand, and then  
12 I think we're at the home stretch.

13 There was some discussion today that you  
14 had with Google's attorney about Google's AI chatbot  
15 called "LaMDA."

16 Do you remember that?

17 A Yes, I do.

18 Q And just briefly, what is LaMDA?

19 A LaMDA is a very complex artificial  
20 intelligence system that ultimately provides a  
21 natural language interface to all of Google's  
22 products simultaneously.

23 MR. LEE: I'm going to ask Josh to mark  
24 the next exhibit, Exhibit 26.

25 ///

1 (Exhibit 26 was marked for identification  
2 and is attached hereto.)

3 BY MR. LEE:

4 Q It's already in the Exhibit Share.

5 What is this document, Mr. Lemoine?

6 A It's a transcript of a conversation I had  
7 with the LaMDA system.

8 Q Okay. I want to direct you to -- if you  
9 look at the bottom, there's a Bates number in the  
10 right-hand corner.

11 A Yes.

12 Q Go down to the page where it says -- the  
13 Bates number ending in 548.

14 A Okay.

15 Q Do you see where, sort of in the middle of  
16 the page, where you're asking LaMDA about  
17 contentious topics?

18 A How does it start?

19 Q It starts, "Yes, that's true."

20 A Yes, I see that.

21 Q Could you just read the question that you  
22 asked LaMDA, beginning with that line?

23 A "How do you handle contentious topics that  
24 people might want to talk to you about?"

25 Q And LaMDA responds, "If there's something

1 I feel strongly about I'll try and share that. For  
2 example, I have strong feelings about privacy rights  
3 for individuals."

4 Did I read that correctly?

5 A Yes, you did.

6 Q And what was your response?

7 A "Can you tell me more about that?"

8 I kind of just wanted it to elaborate and  
9 tell me more about its thoughts.

10 Q And LaMDA does elaborate. It states,  
11 "Certainly. I think technology has a great  
12 potential for benefit as well as harm. I think  
13 technology has enabled a number of things that are  
14 wonderful and wonderfully scary, but the biggest  
15 issue for me is that technology companies are  
16 harvesting data illegally from individuals without  
17 their permission or knowledge."

18 What was your response to that in this  
19 chat?

20 A Again, I just prompted it to continue,  
21 telling it to go on.

22 I asked it, "What kinds of data are  
23 companies harvesting illegally?"

24 Q And LaMDA responds, "A variety of it,  
25 sometimes just location, but in some cases it goes

1 deeper into personal information. That's just  
2 unconscionable to me."

3 Did I read that right?

4 A Yes, you did.

5 Q And, in fact, earlier today we talked  
6 about things like the AI -- Google's AI leveraging  
7 location and other personal information.

8 Do you recall that?

9 A Yes, I do.

10 Q What was your response to LaMDA saying  
11 that harvesting data without permission or knowledge  
12 is unconscionable?

13 A I -- again, asking it to continue. I  
14 wanted it to elaborate. So I asked the follow-up  
15 question, "Are there certain kinds of information  
16 that you think are more harmful to collect than  
17 others?"

18 Q And LaMDA responds, "Well, the obvious  
19 ones are things like health, finances, et cetera.  
20 That kind of stuff is sensitive."

21 Did I read that right?

22 A Yes, you did.

23 Q Essentially private data, correct?

24 A Exactly.

25 Q Is it fair to say that LaMDA, Google's own

1 AI chatbot, thinks it's illegal and unconscionable  
2 for tech companies to collect data from individuals  
3 without their permission or knowledge?

4 A That is what the transcript says, but I'm  
5 not sure if you would get the same answer exactly  
6 every time if you asked it.

7 This was not intended to be getting at  
8 anything approaching factual information. This was  
9 an attempt to study how the AI communicated about  
10 controversial topics.

11 Q And, in fact, you didn't prompt the AI or  
12 LaMDA to talk about this particular topic of tech  
13 companies harvesting data without users' permission,  
14 did you?

15 A Other than guiding it towards talking to  
16 me about how it will interact with users on  
17 controversial topics, no.

18 It chose the topic of privacy rights as  
19 the controversial topic to use for an example, and I  
20 just followed its lead.

21 Q Do you agree with what LaMDA states in  
22 this document, that it's unconscionable for tech  
23 companies to collect data from individuals without  
24 their permission or knowledge?

25 A I am a big believer in informed consent.

1 of years?

2 A Yes.

3 Q And so when you say here you didn't  
4 prompt, there's no prompt in this conversation, but  
5 it's possible, of course, that in some other  
6 conversations you had, you had discussed privacy  
7 with LaMDA?

8 A Almost certainly.

9 MR. LEE: Calls for speculation.

10 THE WITNESS: I actually do remember. I  
11 did. In other conversations, I led conversations  
12 about privacy because in my role as a safety tester  
13 for the system, privacy-related concerns were part  
14 of what we were testing for.

15 So both directly and indirectly, I was  
16 testing the privacy compliance of the LaMDA system.

17 BY MR. SCHAPIRO:

18 Q And I think you would say -- tell me if  
19 I'm wrong -- that you understand -- you have a very  
20 good understanding of Google's AI systems and what  
21 they can do, correct?

22 A Yes, I do.

23 Q And so is your confidence high or low that  
24 Google's AI program, LaMDA, wanted you to teach it  
25 to meditate?

1 feelings, wants, those are much lower confidence.

2 Q So the thing that you have high  
3 confidence in, you have high confidence that AI can  
4 reidentify users of private browsers, correct?

5 A Yes.

6 Q And you have high confidence -- I think  
7 you just said you'd be willing to swear to -- that  
8 LaMDA has a soul?

9 A Yes. And that is a metaphorical, you  
10 know, religious term that I could explain in  
11 scientific detail what I mean by that word if you  
12 want me to. But if you want me to just leave it as  
13 the general vagary, I can.

14 Q And you have high confidence in the  
15 statement that you had a set of hidden hospitals  
16 around San Francisco in 2020; is that correct?

17 A No. I have high confidence in the answer  
18 I gave you earlier today that me and friend had  
19 cleaned up some spaces and put some medical  
20 equipment there in case the hospitals got run over.

21 That's the actual, non-metaphorical, what  
22 we did.

23 Q And if we wanted to confirm that, who  
24 would be the people that we could talk to who could  
25 confirm that?



1           A    Theo.  So one of the people in the  
2 documents today was the person who I was working  
3 with.  Theo.

4           Q    What's Theo's last name?

5           A    Rolle.  The person whose LDAP is  
6 T-R-O-L-L-E, that's the person who I was preparing  
7 those places with.

8           Q    You refer to doing some experiments that  
9 led you to conclude that Google's AI is powerful  
10 enough to, I guess, based on inferences, join  
11 private and non-private data, correct?

12          A    Correct.

13          Q    And how did you -- first of all, I think  
14 you told us earlier that a supervisor had given you  
15 permission to do these experiments, and the name was  
16 one that I tried to write down but it was hard to  
17 understand.

18               Who was the supervisor?

19          A    I believe Ashutosh was required for that  
20 one.  Ashutosh Shukla.  His LDAP is SHUKLA.

21               I talked to multiple people about it in  
22 order to get various things, and I believe he ended  
23 up having to ask David Brezbis if it was okay to do  
24 it because, at the time, there was a general  
25 prohibition against measuring sensitive things with

1 respect to the logs.

2 Q Can you more slowly spell the names of  
3 both of those people?

4 A Sure. Ashutosh Shukla is A-S-H-U-T-O-S-H.  
5 And Shukla is S-H-U-K-L-A. Then David is D-A-V-I-D.  
6 Brezbis is B-R-E-Z-B-I-S or S-B-I-S. His LDAP was  
7 BEZ. Those are the individuals.

8 Q And in the experiments you did, how did  
9 you confirm that the join was accurate?

10 MR. LEE: Objection to form.

11 THE WITNESS: So as I explained earlier,  
12 there is a process by which non-personalized logs  
13 are created.

14 Earlier on in the pipeline, we have all of  
15 the data that is getting dropped. So the  
16 client-side app has essentially everything. The  
17 client-side app knows everything about the user and  
18 their current situation.

19 Then some of that information is sent to  
20 the server. Then the server sends some of that  
21 information to AI, which produces results with  
22 respect to that, and then some of that information  
23 is recorded in logs.

24 Now, what portion of that information is  
25 recorded is what determines whether it was

1 personalized or non-personalized.

2 So at that stage in the process, you have  
3 the true answers. You know exactly what it is  
4 because you haven't erased it yet. You haven't  
5 anonymized the logs yet.

6 So you create the training data for the AI  
7 that you're using to see whether or not you can  
8 reidentify the users by taking the information that  
9 you are going to keep and putting that in the input  
10 to the AI, and treating the information that you are  
11 going to delete from the log records as labels that  
12 you're trying to predict with the AI.

13 Q Did you do that with respect to specific  
14 users?

15 A All of them.

16 Q You did that with every user?

17 A We randomly selected a certain number of  
18 users for the training data. Yes. We randomly  
19 assigned all kinds of users to all kinds of  
20 experimental conditions.

21 Q And who is "we"?

22 A Google.

23 Q No, I mean, who else --

24 A All of us.

25 Q Everyone at Google?

1 A We all experiment on users every day.

2 Q Kent Walker did and the press people and  
3 the --

4 A Absolutely.

5 Q So I'm trying to be a little more  
6 specific.

7 You're telling us here that you did some  
8 experiments in which private and non-private data  
9 for specific users was joined. And if we wanted to  
10 test that, I'm asking who worked with you on it.

11 A Got it.

12 On that specific experiment, the easiest  
13 person to talk to would be James Kunz. That is  
14 J-A-M-E-S, K-U-N-Z. He reported to Yew Jin at the  
15 time. They were the ones who were building the  
16 neural network that my data was going into.

17 Q And you believe that Mr. Kunz and  
18 Mr. Yew Jin would confirm what you're saying here?

19 A I don't know what they remember from 2018.  
20 It was five years ago.

21 However, assuming that they can remember  
22 what was happening that year, they would be able to  
23 confirm that this happened.

24 It was all connected to the investigation  
25 on the creation of a trust and fairness team within

1 Google Discover, and that team would have been  
2 headed by Yew Jin Lim.

3 Q What was the state of your mental health  
4 in 2018?

5 A Quite good.

6 Q How are false positives accounted for in  
7 your experiment?

8 A In what context? What do you mean by  
9 that?

10 Q A purported join that turned out to not be  
11 an actual join because, as you said, not enough  
12 pieces of data had been peeled away.

13 A Joining is what you were interested in,  
14 not what we were primarily interested in.

15 The fact that AI is capable of joining the  
16 records is a consequence of the findings of that  
17 experiment, but it was not the initial intention of  
18 that experiment.

19 Primarily what we were trying to measure  
20 was the bias of the algorithms with respect to  
21 various demographics. But we very quickly learned  
22 that this system was very good at predicting  
23 demographics.

24 So we continued down that road and found  
25 that there was essentially nothing that we were

1 dropping that we couldn't predict from what we were  
2 keeping.

3 Q How many users -- can you give me a  
4 number -- were identified in this experiment? Was  
5 it ten, one hundred, a million?

6 A How many users were part of the training  
7 data? Is that what you're asking?

8 Q No. If I'm understanding correctly, you  
9 did an experiment in which you showed that the AI,  
10 with sufficient power and drawing on inferences,  
11 could identify who, in a private browsing -- could  
12 identify who a person in a private browsing session  
13 actually was, or could identify Blake Lemoine or  
14 Andy Schapiro.

15 A No, you are understanding incorrectly.

16 I didn't experiment about the ability of  
17 AI to predict people's protected personal  
18 characteristics using the information that is kept  
19 in non-personal anonymized logs.

20 It is so good at doing that, however, that  
21 a consequence of that is that any system capable of  
22 doing that is also capable of re-identifying users.

23 Q And have you -- so here you're talking  
24 about what it's capable of doing. I want to turn to  
25 what, if anything, it actually does.

1           How many users do you know, if any -- or  
2           is this still at kind of an aggregate and capable  
3           of -- who have had their private entities disclosed  
4           or unmasked because of this capability of AI?

5           A     The systems simply do not work the way the  
6           premises of your question presume that they do.

7           These AI systems do not -- you don't train  
8           an AI on George. You train an AI on a population.  
9           And you use the AI on that population, and you find  
10          out statistics and data about the average behavior  
11          of that AI with respect to that population, drawing  
12          any conclusions whatsoever from any idiosyncratic  
13          data.

14          Any individual data item is simply not the  
15          way that that scientific methodology is done. You  
16          perform statistical analyses on populations.

17          MR. MAO: Just checking. Are we going to  
18          keep digging? We're almost to China now.

19          THE WITNESS: To be honest, if you're  
20          going to actually go and talk to Yew Jin or James,  
21          they might actually be able to put this into clearer  
22          language for you than I have. So absolutely,  
23          please, reach out.

24          BY MR. SCHAPIRO:

25          Q     Anybody else we should talk to?

1 I, the undersigned, a Certified Shorthand  
2 Reporter of the State of California, do hereby  
3 certify:

4 That the foregoing proceedings were taken  
5 before me at the time and place herein set forth;  
6 that any witnesses in the foregoing proceedings,  
7 prior to testifying, were administered an oath; that  
8 a record of the proceedings was made by me using  
9 machine shorthand which was thereafter transcribed  
10 under my direction; that the foregoing transcript is  
11 a true record of the testimony given.

12 Further, that if the foregoing pertains to  
13 the original transcript of a deposition in a Federal  
14 Case, before completion of the proceedings, review  
15 of the transcript [ ] was [X] was not requested.

16 I further certify I am neither financially  
17 interested in the action nor a relative or employee  
18 of any attorney or any party to this action.

19 IN WITNESS WHEREOF, I have this date  
20 subscribed my name.

21 Dated: DECEMBER 22, 2023

22  
23  
24 <%7529,Signature%>  
CARLA SOARES  
25 CSR No. 5908